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Sheet 1 of 3

PTO-1449 REPRODUCED

ATTORNEY DOCKET NO.
2831.2003-000APPLICATION NO.
09/960,244INFORMATION DISCLOSURE STATEMENT
IN AN APPLICATIONAPPLICANT
Tony W. Ho, et al.

January 18, 2002

FILING DATE
Sept. 21, 2001GROUP
1633

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAM- INER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
VA	5,061,620	Oct. 29, 1991	Tsukamoto, A. et al.	435	7.21	
VA	5,197,985	Mar. 30, 1993	Caplan, A.I. et al.	623	16	
AC	5,486,359	Jan. 23, 1996	Caplan, A.I. et al.	424	93.7	
AD	5,591,625	Jan. 7, 1997	Gerson, S.L. et al.	435	240.2	
AB	5,728,581	Mar 17, 1998	Schwartz, R.M. et al.	435	385	
AF	5,736,396	Apr. 7, 1998	Bruder, S.P. et al.	435	366	
AG	5,811,094	Sept. 22, 1998	Caplan, A.I. et al.	424	93.7	
AH	5,942,225	Aug. 24, 1999	Bruder, S.P. et al.	424	93.7	
AI	5,962,323	Oct. 5, 1999	Greenburger, J.S. et al.	435	384	
VA	6,184,035	Feb 6, 2001	Csete, M. et al.	435	377	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
VA	AL WO 00/69448	23 Nov 2000	PCT			x
VA	AM WO 01/78753	25 Oct 2001	PCT			x

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

VA	AR	Akiyomo, Y. et al., "Functional Repair of Demyelinated Spinal Cord Axons in the Adult Rat by Transplantation of Clonal Neural Stem Cells Derived From Adult Human Brain," <i>Society for Neuroscience Abstracts</i> 25: Abstract 86.9 (1999).
	AS	Azizi, S. A., et al., "Engraftment and migration of human bone marrow stromal cells implanted in the brains of albino rats-similarities to astrocyte grafts," <i>Proc. Natl. Acad. Sci. USA</i> 95: 3908-3913 (1998).
	AT	Azizi, S. A., "Exploiting Non-neural Cells to Rebuild the Nervous System: From Bone Marrow to Brain," <i>The Neuroscientist</i> 6(5): 353-361 (2000).
	AU	Bianco, P., et al., "Bone Marrow Stromal Stem Cells: Nature, Biology, and Potential Applications," <i>Stem Cells</i> 19: 180-192 (2001).
VA	AV	Chopp, M., et al., "Spinal cord injury in rat: treatment with bone marrow stromal cell transplantation," <i>NeuroReport</i> 11(13): 3001-3005 (2000).

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PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 2831.000-1047	APPLICATION NO. 09/960, 244
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		APPLICANT Tony W. Ho et al.	
January 18, 2002 (Use several sheets if necessary)		FILING DATE Sept. 21, 2001	GROUP 1633

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

- VA AW Colter, D. C. et al., "Rapid expansion of recycling stem cells in cultures of plastic-adherent cells from human bone marrow," Proc. Natl. Acad. Sci. USA 97(7): 3213-3218 (2000).
- ↑ AX Coyle, A.J., et al., "Human Mesenchymal Stomal Cells Can Differentiate into Oligodendrocyte Lineage in Transplantation Experiments with MD Rats," Soc. for Neurosci. Abs. 26: Abstract 415.11 (2000).
- AY Eglitis, M. A., et al., "Hematopoietic cells differentiate into both microglia and macroglia in the brains of adult mice," Proc. Natl. Acad. Sci. USA 94: 4080-4085 (1997).
- AZ Ferrari, G., et al., "Muscle Regeneration by Bone Marrow-Derived Myogenic Progenitors," Science 279: 1528-1530 (1998).
- AR2 Himes, B. T. et al., "Grafting human bone marrow stromal cells into injured spinal cord of adult rats," Society for Neuroscience Abstracts 25: Abstract 86.11 (1999).
- AS2 Kopen, G. C., et al., "Marrow stromal cells migrate throughout forebrain and cerebellum, and they differentiate into astrocytes after injection into neonatal mouse brains," Proc. Natl. Acad. Sci. USA 96: 10711-10716 (1999).
- AT2 Li, J., et al., "Nontransformed colony-derived stromal cell lines from normal human marrows. II. Phenotypic characterization and differentiation pathway," Experimental Hematology 23: 133-141 (1995).
- AU2 Liechty, K. W., et al., "Human mesenchymal stem cells engraft and demonstrate site-specific differentiation after in utero transplantation in sheep," Nature Medicine 6(11): 1282-1286 (2000).
- AV2 Majumdar, M .K., et al., "Phenotypic and Functional Comparison of Cultures of Marrow-Derived Mesenchymal Stem Cells (MSCs) and Stromal Cells," J. Cell. Phys. 176: 57-66 (1998).
- VA AW Pereira, M. K., et al., "Cultured adherent cells from marrow can serve as long-lasting precursor cells for bone, cartilage, and lung in irradiated mice," Proc. Natl. Acad. Sci. USA 92: 4857-4861 (1995).

EXAMINER <i>V. Spivanova</i>	DATE CONSIDERED <i>3-19-2004</i>
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SOCIETY FOR NEUROSCIENCE

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09/960,244INFORMATION DISCLOSED IN CITATION
IN AN APPLICATION

January 18, 2002

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APPLICANT
Tony W. Ho, et al.FILING DATE
Sept. 21, 2001GROUP
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U.S. PATENT DOCUMENTS

EXAM- INER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

VA	AZ2	Phinney, D. G., et al., "Donor Variation in the Growth Properties and Osteogenic Potential of Human Marrow Stromal Cells," <i>J. Cell. Biochem.</i> 75: 424-436 (1999).
↑	AY2	Phinney, D. G., et al., "Plastic Adherent Stromal Cells From the Bone Marrow of Commonly Used Strains of Inbred Mice: Variations in Yield, Growth, and Differentiation," <i>J. Cell. Biochem.</i> 72: 570-585 (1999).
	AZ2	Pittenger, M. F., et al., "Multilineage Potential of Adult Human Mesenchymal Stem Cells," <i>Science</i> 284: 143-147 (1999).
	AR3	Prockop, D. J., "Marrow Stromal Cells as Stem Cells for Nonhematopoietic Tissues," <i>Science</i> 276: 71-74 (1997).
	AS3	Roisen, F. J., et al., "Murine and Human Adult Olfactory Neuroepithelial Stem Cells," <i>Society for Neuroscience Abstracts</i> 26: Abstract 312.7 (2000).
	AT3	Sanchez-Ramos, J., et al., "Adult Bone Marrow Stromal Cells Differentiate into Neural Cells in Vitro," <i>Experimental Neurology</i> 164: 247-256 (2000).
	AU3	Sanchez-Ramos, J., et al., "Bone marrow stromal cells grafted into adult rat brain migrate, organize in architectonic patterns and express neuronal markers," <i>Neurology</i> 52(6 SUPPL. 2): A14, S06.001 (1999).
	AV3	Schwartz, E. J., et al., "Multipotential Marrow Stromal Cells Transduced to Produce L-DOPA: Engraftment in a Rat Model of Parkinson Disease," <i>Human Gene Therapy</i> 10: 2539-2549 (1999).
	AW3	Taupin, P., et al., "FGF-2-Responsive Neural Stem Cell Proliferation Requires CCg, a Novel Autocrine/Paracrine Cofactor," <i>Neuron</i> 28: 385-397 (2000).
	AX3	Woodbury, D., et al., "Adult Rat and Human Bone Marrow Stromal Cells Differentiate Into Neurons," <i>J. Neurosci. Res.</i> 61: 364-370 (2000).
VA	AY3	Woodbury, D., et al., "Adult Rat and Human Bone Marrow Stromal Cells Differentiate Into Neurons," <i>Society for Neuroscience Abstracts</i> 26: Abstract 312.9 (2000).
EXAMINER	V. Afrunova	DATE CONSIDERED 3-15-2004

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**SUPPLEMENTAL INFORMATION DISCLOSURE
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IN AN APPLICATION**

November 6, 2003

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ATTORNEY DOCKET NO.
2831.2003-000APPLICATION NO.
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APPLICANT

Tony W. Ho, et al.

FILING DATE

September 21, 2001

CONFIRMATION NO.

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF NO.	DOCUMENT NUMBER	ISSUE DATE / PUBLICATION DATE	NAME
	AA3			
	AB3			
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VP	AF3	2001/0034061 A1	October 25, 2001	Csete, et al.
	AG3			
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SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION		APPLICANT Tony W. Ho, et al.			
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EXAM- INER INITIAL	DOCUMENT NUMBER	ISSUE DATE / PUBLICATION DATE		NAME	
VA	AC3 US 2003/0003574 A1	01/02/03		Toma, et al.	
VA	AD3 US 2003/0003572 A1	01/02/03		Anderson, et al.	
VA	AB3 US 2003/0017587 A1	01/23/03		Rader, et al.	
FOREIGN PATENT DOCUMENTS					
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ATTORNEY DOCKET NO.
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Tony W. Ho, et al.FILING DATE
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U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL	DOCUMENT NUMBER	ISSUE DATE / PUBLICATION DATE	NAME
AB	US 2002/0168765 A1	November 14, 2002	Prockop et al.
AB			
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FOREIGN PATENT DOCUMENTS

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION		APPLICANT Tony W. Ho, et al.				
November 1, 2002 (Use several sheets if necessary)		FILING DATE September 21, 2001	CONFIRMATION NO. 4326	GROUP 1633		
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EXAM- INER INITIAL	DOCUMENT NUMBER	ISSUE DATE / PUBLICATION DATE	NAME			
VA	US 2002/0146821 A1	October 10, 2002	Sanchez-Ramos et al.			
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PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 3831.2003-000	APPLICATION NO. 09/960,244
SECOND SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION		APPLICANT Tony W. Ho, et al.	
May 9, 2002 (Use several sheets if necessary)		FILING DATE September 21, 2001	GROUP 1633

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
VA	AA2	4,608,199	08/26/86	Caplan, et al.	530	A14-11	VED
↑	AB2	4,609,551	09/02/86	Caplan, et al.	424	95	FILED
	AC2	4,620,327	11/04/86	Caplan, et al.	632	10 7-3	2002
	AD2	5,226,914	07/13/93	Caplan, et al.	67	RECH CENTER	1600/2900
	AE2	5,643,736	07/01/97	Bruder, et al.	435	4.21	
	AF2	5,733,542	03/31/98	Haynesworth, et al.	424	93.7	
	AG2	5,837,539	11/17/98	Caplan, et al.	435	332	
	AH2	5,855,619	01/05/99	Caplan, et al.	623	11	
	AI2	6,010,696	01/04/00	Caplan, et al.	424	93.7	
↓	AJ2	6,087,113	07/11/00	Caplan, et al.	435	7.1	
VA	AK2	6,174,333B1	01/16/01	Kadiyala, et al.	623	11.11	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
VA	AL2	WO 01/11011A2	15-FEB-01	PCT			
VA	AM2	WO 02/34889	02 MAY 02	PCT			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

VA	AZ3	Ashhurst, D.E., et al., "The collagens and glycosaminoglycans of the extracellular matrices secreted by bone marrow stromal cells cultured in vivo in diffusion chambers," <i>J. Orthop Res</i> 8(5):741-749 (1990).
↑	AR4	Ashton, B.A., et al., "Formation of Bone and Cartilage by Marrow Stromal Cells in Diffusion Chambers in Vivo," <i>Clinical Orthopaedics and Related Research</i> , 151:294-307 (1990).
	AS4	Ashton, B.A., et al., "Distribution of Fibroblastic Colony-Forming Cells in Rabbit Bone Marrow and Assay of their Osteogenic Potential by an in vivo Diffusion Chamber Method," <i>Calcif Tissue Int.</i> 36:83-86 (1984).
	AT4	Bab, I., et al., "Assessment of an in vivo Diffusion Chamber Method as a Quantitative Assay for Osteogenesis," <i>Calcif Tissue Int</i> 36:77-82 (1984).
VA	AU4	Bab, I., et al., "Osteogenesis in in vivo diffusion chamber cultures of human marrow cells," <i>Bone and Mineral</i> , 4:373-386 (1988).

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PTO-1449 REPRODUCED

ATTORNEY DOCKET NO.
2831.2003-000APPLICATION NO.
09/960,244SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
IN AN APPLICATION

May 9, 2002

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APPLICANT
Tony W. Ho, et al.

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FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

VA	AV4	Bab, I., et al., "Ultrastructure of Bone and Cartilage Formed in vivo in Diffusion Chambers," <i>Clinical Orthopaedics and Related Research</i> , Section III:243-254 (1984)
VA	AV4	Benayahu, D., et al., "Bone Marrow-Derived Stromal Cell Line Expressing Osteoblastic Phenotype in Vitro and Osteogenic Capacity In Vivo," <i>Journal of Cellular Physiology</i> 140:1-7 (1989).
	AX4	Budenz, R.W. et al., "Osteogenesis and Leukopoieses within Diffusion-Chamber Implants of Isolated Bone Marrow Subpopulations," <i>The American Journal of Anatomy</i> 159:455-474 (1980).
	AV4	Diduch, D.R., et al., "Two cell lines from bone marrow that differ in terms of collagen synthesis, osteogenic characteristics, and matrix mineralization," <i>Journal of Bone & Joint Surgery</i> 75:92-105 (1993).
	AZ4	Friedenstein, A.J., et al., "Bone marrow osteogenic stem cells: in vitro cultivation and transplantation in diffusion chambers," <i>Cell Tissue Kinet.</i> 20:263-272 (1987).
	AR5	Gundle, R., et al., "Human Bone Tissue Formation in Diffusion Chamber Culture in vivo by Bone-Derived Cells and Marrow Stromal Fibroblastic Cells," <i>Bone</i> 16(6):597-601 (1995).
	AS5	Haynesworth, S.E., et al., "Cell Surface Antigens on Human Marrow-Derived Mesenchymal Cells are Detected by Monoclonal Antibodies," <i>Bone</i> 13:69-80 (1992).
	AT5	Haynesworth, S.E., et al., "Characterization of Cells with Osteogenic Potential from Human Marrow," <i>Bone</i> 13:81-88 (1992).
VA	AU5	Kataoka, H., et al., "Transplant of bone marrow and muscle-derived connective tissue cultures in diffusion chambers for bioassay of bone morphogenetic protein," <i>Clinical Orthopaedics and Related Research</i> 286:262-70 (1993).

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Sheet 3 of 3

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SECOND SUPPLEMENTAL
INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

May 21, 2002

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ATTORNEY DOCKET NO.
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Tony W. Ho, et al.FILING DATE
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U. S. PATENT DOCUMENTS

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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLA- TION YES NO
		2				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

VA	AV5	Krebsbach, P.H., et al., "Bone Formation in vivo: Comparison of Osteogenesis by Transplanted Mouse and Human Marrow Stromal Fibroblasts," <i>Transplantation</i> 63(8):1059-1069 (1997).
1	AW5	Lennon, D.P., et al., "Cultivation of Rat Marrow-Derived Mesenchymal Stem Cells in Reduced Oxygen Tension: Effects on In Vitro and In Vivo Osteochondrogenesis," <i>Journal of Cellular Physiology</i> 187:345-355 (2001).
	AX5	Mardon, H.J., et al., "Development of osteogenic tissue in diffusion chambers from early precursor cells in bone marrow of adult rats," <i>Cell Tissue Research</i> , 250:157-165 (1987).
	AY5	Quinones, R.R., "Hematopoietic Engraftment and Graft Failure After Bone Marrow Transplantation," <i>The American Journal of Pediatric Hematology/Oncology</i> 15(1):3-17 (1993).
	AZ5	Thomson, B.M., et al., "Preliminary characterization of porcine bone marrow stromal cells: skeletogenic potential, colony-forming activity, and response to dexamethasone, transforming growth factor beta, and basic fibroblast growth factor," <i>J. Bone Min Res</i> 8(10): 1173-1183 (1993).
VA	AR6	Asselineau, D. et al., "Antibodies Specific for Papillary Fibroblasts as Markers for Skin Quality," Published Patent Application No: 2001/0036642A1, Published 11/01/01, Filed 11/29/00.

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V. H. Brown

DATE CONSIDERED

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